What Is Claimed Is:

1. An angle-resolving antenna system for pulse radar applications, in particular in automotive technology, having the following features:

- two radar sensors (8, 9) for the determination of distance information and angular deviation, each having a separate transmitting antenna and receiving antenna, are provided;
- the receiving antennas (2, 21, 22) of the two radar sensors (8, 9) are designed to be switchable with regard to their main beam direction as well as to their beam width,
- an evaluation unit (4) is provided for obtaining the angular deviation from the receiving signals of the two radar sensors (8, 9) in unlike switching states.

2. The antenna system as recited in Claim 1, wherein at least one column (21, 22) of antenna exciters that is capable of being switched on and off is provided for switching the beam width.

3. The antenna system as recited in Claim 1 or 2, wherein a phase control of at least two columns of antenna exciters is provided for switching the main beam direction.

4. The antenna system as recited in one of Claims 1 through 3, wherein a plurality of columns of receiving antenna exciters are combined into one antenna array, in order to achieve beam shaping in the azimuth direction.

5. The antenna system as recited in one of Claims 1 through 4, wherein receiving antennas of different radar sensors having a narrow beam width with reference to their main beam direction are directed outward away from the midperpendicular of the radar sensors, in order in particular to obtain precise

detection at the edges of a vehicle path in the forward and/or reverse direction.

6. The antenna system as recited in one of Claims 1 through 4, wherein the receiving antennas of different radar sensors (8, 9) having a narrow beam width with reference to their main beam direction are inclined toward the midperpendicular of the radar sensors (8, 9), in order in particular to obtain an increased range in the direction of driving.